



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/550,207

09/21/2005

Alfred Schmid

4358-20

1741

23117

7590

08/08/2007

NIXON & VANDERHYE, PC  
901 NORTH GLEBE ROAD, 11TH FLOOR  
ARLINGTON, VA 22203

EXAMINER

GEHMAN, BRYON P

ART UNIT

PAPER NUMBER

3728

MAIL DATE

DELIVERY MODE

08/08/2007

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

SP

## Office Action Summary

Application No.

10/550,207

Applicant(s)

SCHMID, ALFRED

Examiner

Bryon P. Gehman

Art Unit

3728

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 21 September 2005.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-23 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-23 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
  - 2) ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>9/21/05</u> .   | 6) <input type="checkbox"/> Other: _____                          |

Art Unit: 3728

1. Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. **It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.**

2. The abstract of the disclosure is objected to because it exceeds 150 words and the opening phrase "The invention relates to" is an implied phrase and may be deleted.

Correction is required. See MPEP § 608.01(b).

3. The spacing of the lines of the specification is such as to make reading difficult. New application papers with lines 1½ or double spaced on good quality paper are required.

4. A substitute specification without the claims is required pursuant to 37 CFR 1.125(a) because the spacing is not proper in the original specification.

A substitute specification must not contain new matter. The substitute specification must be submitted with markings showing all the changes relative to the immediate prior version of the specification of record. The text of any added subject matter must be shown by underlining the added text. The text of any deleted matter

must be shown by strike-through except that double brackets placed before and after the deleted characters may be used to show deletion of five or fewer consecutive characters. The text of any deleted subject matter must be shown by being placed within double brackets if strike-through cannot be easily perceived. An accompanying clean version (without markings) and a statement that the substitute specification contains no new matter must also be supplied. Numbering the paragraphs of the specification of record is not considered a change that must be shown.

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. Claims 1-23 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. In claim 1, line 2, the phrase "preferably cylindrical" renders the claims indefinite because the claims include elements not actually disclosed (those encompassed by other than "cylindrical"), thereby rendering the scope of the claims unascertainable. See MPEP § 2173.05(d). In line 6, "axially movable" is indefinite, as "preferably cylindrical" in line 2 only provides basis for "axially" when the container part is cylindrical, but is indefinite otherwise. In line 8, "the piston" lacks antecedent for one piston, or is inconsistent with line 6. See also line 10. Also in line 8, "preferably powder-like component" is indefinite, as it sets forth elements not actually disclosed (those encompassed by other than "powder-like"), and the metes and bounds

of "powder-like" is indefinite, as it is not clear what parameter or parameters are encompassed to make the component "like" a powder. In line 10, "on or in the piston" is indefinite as it is alternative and it is unclear what options are engendered by "on or in". In line 11, "preferably fluid" again renders the claims indefinite because the claims include elements not actually disclosed (those encompassed by other than "fluid"), and it is indefinite what the difference is between "fluid" and "at least flowable", as they appear to define the same characteristic. Also, "mentioned" is redundant and just be deleted. In line 13, "the first and the second chamber" is indefinite it is referring to the first and second chambers, and be either --the first and second chambers-- or --the first chamber and the second chamber--. In line 14, "the initial condition" lacks antecedent basis. In line 15, "activation means" lacks a clear functional statement, as the phrase "in order" takes the functionality away from the "means". In lines 15-16, "the initially closed passage" lacks any antecedent basis. In line 16, "the first and second receptacle" is indefinite, as it lacks antecedent basis, and is unclear as to how many receptacles are being defined. In line 17, "the one receptacle into the other receptacle" lack antecedent basis or are inconsistent with the indefinite receptacles of line 16. In line 19, the sleeve is indefinitely defined to distinguish what comprises "one side" thereof. In line 23, "with a first and a second end" is indefinite as to distinguishing two ends, and should be --a first end and a second end--. In line 24, a broad range or limitation together with a narrow range or limitation that falls within the broad range or limitation (in the same claim) is considered indefinite, since the resulting claim does not clearly set forth the metes and bounds of the patent protection desired. See MPEP § 2173.05(c). Note the explanation

given by the Board of Patent Appeals and Interferences in *Ex parte Wu*, 10 USPQ2d 2031, 2033 (Bd. Pat. App. & Inter. 1989), as to where broad language is followed by "such as" and then narrow language. The Board stated that this can render a claim indefinite by raising a question or doubt as to whether the feature introduced by such language is (a) merely exemplary of the remainder of the claim, and therefore not required, or (b) a required feature of the claims. Note also, for example, the decisions of *Ex parte Steigewald*, 131 USPQ 74 (Bd. App. 1961); *Ex parte Hall*, 83 USPQ 38 (Bd. App. 1948); and *Ex parte Hasche*, 86 USPQ 481 (Bd. App. 1949). In the present instance, claim 1, line 24 recites the broad recitation "at least one guide element", and the claim also recites "a projection or protrusion" which is the narrower statement of the range/limitation. It is unclear whether the alternative is between one or more guide elements and a single "projection and protrusion" or if the possible multiple carries over to the narrower statement as well. It is also unclear what the difference between a "projection" and a "protrusion" is to be defined alternatively. In line 26, a singular "guide path" lacks antecedent basis or is inconsistent with line 23. In line 27, "for a guide element" is indefinite, as such has been positively defined in line 24, and such antecedent should be clearly reflected, as the same term can not be used for a positively defined element and also an imaginary possible adjunct. In lines 28 and 29, the singular "guide element" and "guide path" are inconsistent with lines 24 and 23, respectively. In line 30, "this must move" is indefinite as to what "this" is.

In claim 2, lines 1 and 2, the singular "guide element" and "guide path" are inconsistent with claim 1. See also claims 3, 4

In claim 3, line 2, "is a slot or a groove" is alternatively indefinite and should be --is one of a slot and a groove--.

In claim 5, lines 2 and 4, "in each case" is indefinite as to what constitutes a "case", as such is not clear what "cases" are being referred to. In lines 2 and 3, "one guide element" and "one guide path" should be --one said guide element-- and --one said guide path--, respectively to indicate their being the structures defined previously.

In claim 7, line 2, "the displacement body" lacks antecedent basis from parent claim 1. . See also claims 8, 9 and 14-20. In claim 7, line 3, "essentially" is indefinite whether it means "substantially" or "necessarily", and "the passage" lacks antecedent basis.

In claim 9, line 3, "essentially flush" is indefinite whether it means "substantially flush" or "necessarily flush", and "the piston" lacks antecedent basis or is inconsistent with claim 1.

In claim 10, line 2, "the piston" is again indefinite. See also claims 11-12 and 21.

In claim 11, line 2, "the passage" lacks antecedent basis. In line 3, "the front" and "the end-face" lack antecedent basis or consistency with claim 1.

In claim 14, line 2, "the front part..." lacks antecedent basis.

In claim 15, lines 2-3, "axial direction" is indefinite because of its indefiniteness in claim 1. See also claim 21, line 3. In line 3, "the casing" lacks antecedent basis from claim 1.

In claim 19, line 3, "the base..." lacks antecedent basis from claim 1. In lines 4-5, the separation of "pin" and "(37)" is improper.

In claim 20, line 2, "a hollow or solid body" is indefinitely alternative and should be --one of a hollow and solid body--.

In claim 22, lines 7-8, there is insufficient structural relation defined to distinguish a structure that will have "removal of the sleeve, the activation part is forcibly displaced".

In claim 23, there is insufficient structural definition to support the functional recitation "must be displaced relative to the mixing capsule". In line 3, there is no antecedent basis to render "forwards and back" definite.

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

8. Claims 22-23 are rejected under 35 U.S.C. 102(b) as being anticipated by Wilson (5,509,530). Disclosed is a method of activating a mixing capsule accommodating two components, the method comprising a first component (70) stored in a first chamber (inside 14) is brought together with a second component (41) by displacing an activation part (57), and a sleeve (16) cooperating with the activation part is located on the mixing capsule and the sleeve is guided on the mixing capsule in a movable manner and when removed, the activation part may be forcibly displaced.

As to claim 23, the sleeve (16) defines a curved guide path (at 65) that distinguishes a shallow U shape.



9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. Claims 1-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schmid (2004/0251147) in view of Wilson (5,509,530). Claims 1-5, 10 and 20-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mukasa et al. (6,386,872) in view of Wilson. Claims 1-5, 10-13 and 20-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Frick et al. (5,392,904) in view of Wilson. Schmid, Mukasa et al. and Frick et al. each disclose a mixing capsule with a cylindrical container part (13; 1; 12; respectively) with an end-face with an ejection nozzle (19; 4; 24), and an open rear side (at 46; opposite 4; opposite 24) with an opening, a piston (15; 2; 14) axially movable in the container part, a first chamber (35; 1a; receiving 38) between the end-face and the piston, a second chamber (23; 2a; inside 14) in the piston, a through opening (at 25; at 2c; at 32) initially closed, and an axially displaceable activation means (37; 3a; 16) to open the through opening to allow mixing. Wilson discloses an additional sleeve (16) disposed on a mixing capsule with an activation means (66), the sleeve disclosing an abutment surface (52) for the activation means and a guide path (65) and guide element (26) to actuate the activation means. To modify the mixing capsule of any one of Schmid, Mukasa et al. and Frick et al. employing the actuation sleeve of Wilson

would have been obvious in order to cover and protect the activation means prior to activation. The exact shape of the guide path would have been an obvious matter of choice and degree. The guide path of Wilson has a dip in the middle defining a shallow U shape.

As to claims 2-5, the guide path and element structure are disclosed by Wilson.

As to claims 6-9, 14-15 and 19, Schmid, discloses a displacement body (33).

As to claim 10, Schmid, Mukasa et al. and Frick et al. each disclose the second chamber in the piston.

As to claims 11-13, Schmid, and Frick et al. each disclose a membrane (29; 34) secured to a sealing ring (encircling 23; encircling the opening of 14).

As to claims 16-18, Schmid discloses an activation pin (37) as claimed.

As to claims 20 and 21, Schmid, Mukasa et al. and Frick et al. each disclose a displacement body (33; part of 3; part of 16) that is hollow or solid, and the activation means as a further piston.

As to claims 22 and 23, the interaction of the sleeve of Wilson with the capsule of any one of Schmid, Mukasa et al. and Frick et al. would distinguish the claimed method.

11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Shown are mixing capsules similar to that disclosed by applicant.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Bryon P. Gehman whose telephone number is (571)

Art Unit: 3728

272-4555. The examiner can normally be reached on Tuesday through Thursday from 7:30 am to 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mickey Yu, can be reached on (571) 272-4562. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Bryon P. Gehman  
Primary Examiner  
Art Unit 3728

BPG